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ABSTRACT

The California Plan for Career-Vocational Education (CVE) was created to lay the groundwork for the reform, revitalization, and redirection of CVE in California. Part One of the plan established the unifying mission for CVE in California and identified issues and goals for program implementation. The purpose of Part Two is to identify strategies and expected outcomes that will provide leadership and direction at the local and state levels. Section I provides a background and overview of CVE in California, including information on the state's mission statement for CVE; factors influencing CVE; current and future developments in CVE/business/education partnerships; CVE goals by educational level; coordination within public education; and ways in which the plan can be utilized at local and state levels. Section II suggests strategies and expected outcomes related to 11 major issues facing CVE: research and program planning; program quality and delivery; program staffing; delineation of functions in program delivery; interagency linkage; articulation of programs and support services; employer linkage; student access and retention; public awareness; program accountability; and program funding. Finally, section III provides a summary and conclusions on the status of CVE in california. An appendix provides a priority ranking of the expected outcomes identified in section II. (JMC)

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ED319448

California Plan for Career-Vocational Education

Part Two: Implementation Strategies

JC 900297

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California State Department of Education
Chancellor's Office, California Community Colleges

March 1990

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California Plan for Career – Vocational Education. Part II: Implementation Strategies

This document is the result of a joint planning effort by: The California State Department of Education, Career-Vocational Education Division, and The Chancellor's Office, California Community Colleges, Vocational Education Unit in cooperation with multiple state agencies, schools, colleges, and representatives of business and industry.

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INTRODUCTION AND PURPOSE

The development and publication of the *California Plan for Career-Vocational Education, Part One: Policy Directions* in January 1989 was a landmark event for vocational education in this state. For the first time, California had a plan for career-vocational education that focused on the identification of state needs and priorities, rather than a compliance plan prepared in response to federal mandates. It laid the groundwork for the reform, revitalization, and redirection of career-vocational education in California, including an increased awareness and expansion of career-vocational education at the elementary and middle-school levels, and an emphasis on the importance of establishing a foundation for life-long learning. The *California Plan* was developed as a joint effort over a two-year period between the state's two largest providers of career-vocational education, the State Department of Education and the Chancellor's Office of the California Community Colleges. It included broad input and major field involvement of teachers, counselors, and administrators at all levels and with representatives of business, industry, and State agencies. In short, those who use or provide career-vocational education programs and services contributed significantly to the development of the *Plan*.

The partnerships that were formed during the evolution of the *California Plan* have provided us with an unprecedented opportunity to establish a human resource development network that will strengthen the connection between education, training providers, and employers. *Part One* of the Plan identified eleven major issues facing career-vocational education as the State approaches the 21st century, with related goals for each of the issues.

These issues are:

- Research and Program Planning
- Program Quality and Delivery
- Program Staffing
- Delineation of Functions in Program Delivery
- Interagency Linkage
- Articulation of Programs and Support Services
- Employer Linkage
- Student Access and Retention
- Public Awareness
- Program Accountability
- Program Funding

The purpose of ***Part Two:***

Implementation Strategies

is to identify strategies and expected outcomes that will provide leadership and direction at the local and State levels...

Part One of the Plan established the unifying mission for career-vocational education in California, and identified the issues and goals for program implementation at the State and local levels. The purpose of *Part Two: Implementation Strategies* is to identify strategies and expected outcomes that will provide leadership and direction at the local and State levels as action plans are developed. These suggested strategies and expected outcomes are intended to:

- assist career-vocational education at the local and State levels in planning for changes that will bring about the expected outcomes for each of the eleven issues.

- suggest a wide variety of tested, successful approaches that will allow local and State career-vocational education staff to select those strategies that are compatible with their goals and available resources, that will meet the unique needs and characteristics of their communities, and that realistically can be achieved within a given period of time.

Special appreciation and gratitude is expressed to the Steering Committee, Joint Advisory Policy Council, writing teams from each of six educational levels, and field personnel who assisted over a two-year period in developing and refining both *Part One* and *Part Two* of the *Plan*. But the work is not yet finished. Each of the eleven issues is crucial and has implications for individuals and local communities, as well as for the economic development of the State. With a concerted effort by all those involved, the State can achieve our goals, maintain and expand California's leadership position both in the national and world economies, and build the future to which it aspires and can attain.

SECTION I

Background and Overview of Career-Vocational Education in California

Background

California currently has the sixth-largest economy in the world, and projections are that, by the turn of the century, it will be fourth, after Japan, the Soviet Union and the total United States. However, California's economic future-which includes its ability to compete in a world market, maintain the highest standard of living and quality of life in the nation and in the world, maintain its technological edge, and continue as the nation's economic leader - is heavily dependent on the ability of the State's educational system to prepare an adequate supply of well-qualified, productive workers.

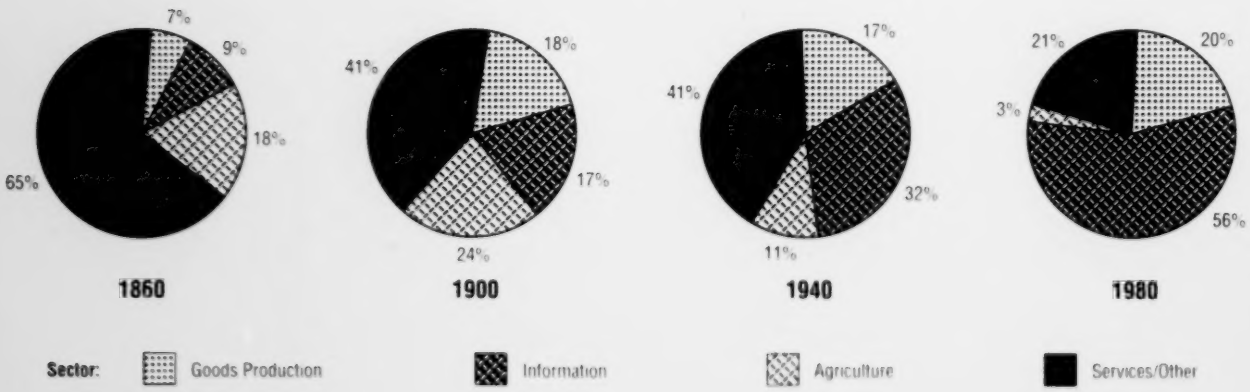
It is clear the economy has entered a new phase that is dramatically different from past decades. California's economy today is increasingly information based; that is, an economy based on the creation, processing, storage, retrieval, and analysis of information. Figure 1 illustrates this dramatic change and the shift in the work force over the last 120 years.

Figure 1

California Has Entered the Information Age[1]

[1] California Economic Development Corporation. *Vision: California 2010*. Sacramento, CA. 1987.

Share By Year (Percentage)



Note: *For the purposes of composing this table, all employees involved in the creation, processing, storage, retrieval and analysis of information, e.g., office workers, are included in that classification. Other analyses classify many of those employees in services.*

Over 56 percent of the current work force is involved in information, compared to 32 percent in 1940. Predictions are that most jobs will be more complex and technical than in the past, and over half of all new jobs created by the turn of the century will require some postsecondary education.

The changing nature of work and the increase in knowledge required by an altered labor market have meant the elimination of many traditional unskilled and semi-skilled entry-level jobs. At the same time, these factors simultaneously have created 200,000-300,000 new jobs annually that require higher levels of core academic skills, critical thinking, and problem-solving ability. For example, the demand for skilled technicians is expected to grow 38 percent in the next decade. Employers already are finding it increasingly difficult to fill many of the currently existing, more-technical positions. Older, experienced workers are losing jobs because their skills are incompatible with the major changes that have occurred in labor market demands, while many young people similarly are unable to meet the requirements for those higher-skilled jobs. Although vocational education historically has prepared young people to successfully enter the labor force directly after high school, a number of factors have caused a fundamental change in the mission of vocational education. This change has been caused by the increased level of expectations placed on career-vocational education by the changes in society and the demands of the public and private sectors. The mission for career-vocational education in California was developed by the Steering Committee after extensive reflection and discussion.

Mission Statement for Career-Vocational Education

The mission of career-vocational education in California is to enhance the personal and economic well-being of individuals and to develop human resources which contribute to the economic development of the state.

This mission is based on the premise that there should be a continuum of career-vocational education programs and support services responsive to equity, changing demographic patterns, changing needs, advances in technology, working conditions, and skill requirements of employment.

To accomplish its mission, career-vocational education must establish and strengthen partnerships with employers, labor, government, and other appropriate public and private agencies to ensure that students are literate, prepared to seek and obtain work, hold employment, advance in their chosen careers, and adjust to changing labor market demands.

Factors Influencing Career-Vocational Education

The factors that have affected and will continue to affect career-vocational education have been grouped into six broad categories. Although some of the factors are beyond the control of educators, they nonetheless influence the nature and scope of career-vocational education programs and services. These factors, which are described more explicitly in Part One, are reviewed briefly below.

1. ***Changing Technology***
   Technology has changed and will continue to change working patterns and skill requirements. Jobs require increased academic skills, as well as more communication, information-processing, and critical-thinking skills. Workers are finding themselves changing jobs or careers five or more times in a lifetime, and employee education and retraining will become a major priority over the next ten years.

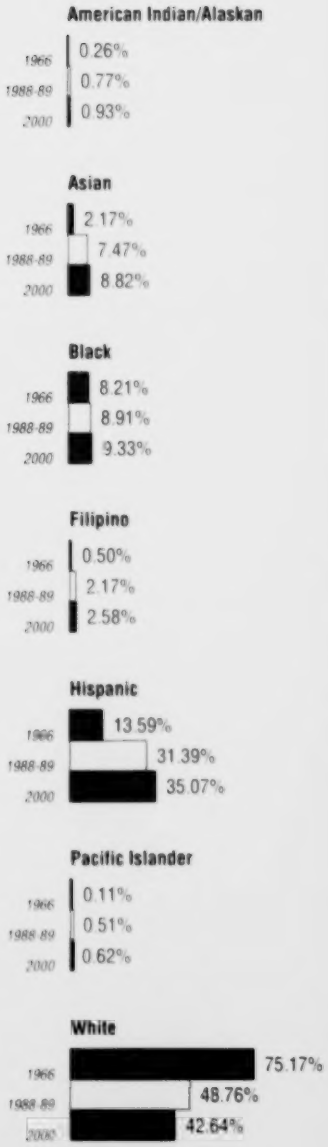
2. ***Economic and Occupational Trends***
   Changing industrial patterns are reflected by changing student and employer demands on the educational system. More than 50 percent of the jobs in California come from small businesses, which depend heavily on public education for well-trained, skilled workers. Career-vocational education must become more sensitive and responsive to labor market demands.

3. ***Changing Demographic Patterns***
   California's growing school population reflects an increasing cultural and ethnic diversity, with minorities comprising the majority. Although changing ethnic patterns provide the State with a rich bilingual resource, many residents lack functional educational skills and/or English proficiency, as well as occupational skills. Career-vocational education must offer options suitable to the vastly divergent individual needs and learning styles of California's current and future population.

4. ***Changing Social Values and Patterns***
   The greater number of women who want or need to participate in the work force (which will be approximately 60 percent female by the year 2000) and the marked increase in the number of single parents have greatly expanded the need for support services. These services, such as child care and transportation, are necessary program elements if individuals are

Figure 2

California's Changing School Population



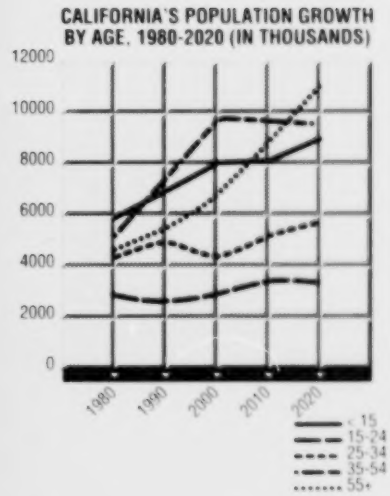
Total Past Ethnic Enrollment: 1966
4,357,634

Total Present Ethnic Enrollment: 1988-89
4,518,120

Total Projected Ethnic Enrollment: 2000
6,044,868

Source: California State Department of Education

Figure 3



Source: California Department of Finance

to attain marketable skills, become fully employed, and establish personal and economic self-sufficiency.

5. ***Student Attrition***
For the past 15 years, increasing numbers of California students have dropped out of high school prior to graduating. The overall figure statewide is approximately 25 percent. In some urban, inner city districts it is as high as 50 percent. These students are leaving school without a high school diploma, marketable skills, or the knowledge of other avenues to education and training. Many of them are unemployed and unemployable. A major effort is needed to reverse this trend.

6. ***Educational Reform***
The increasing need to help all students attain core academic skills has resulted in the integration of critical-thinking, problem-solving, and other academic skills throughout the career-vocational education curriculum. However, by increasing the number of academic courses required for high school graduation, educational reform has concomitantly reduced the number of career-vocational education and other electives available to high school students, limiting the number of alternative instructional strategies for students to meet the core academic requirements.

The Vision for Career-Vocational Education

The vision for career-vocational education is one in which there is a strong sense of collegiality and shared purpose among policy makers, academic/liberal arts and vocational administrators, counselors and teachers, students, parents, the community, and business and industry. This is translated into a commitment to the achievement of clear, identified goals and expected outcomes. In this vision, students become aware of and explore careers, make informed career choices, and have the opportunity and are encouraged to enroll in equitable, quality career-vocational education programs. These programs prepare them to participate effectively in today's labor market and to adapt to present, emerging, and constantly changing labor market conditions. Students from diverse social, ethnic, and economic backgrounds leave career-vocational education programs with high levels of academic, critical-thinking, and occupational skills and recognize the need for continued, life-long learning to stay abreast of rapid technological change. An essential part of the vision is that all students will have a high regard for the work ethic and be motivated to do their best in educational, work, family, and community endeavors.

For the vision to be achieved, the following is critical. Career-vocational education must:

begin at an early age and provide students with the knowledge to make rational and informed choices about careers.

be staffed with talented and committed teachers and administrators who are given the opportunity for personal growth and development and are accorded recognition for their accomplishments.

be a catalyst that motivates students to stay in school and to succeed in work, the home, and the community.

provide equal opportunities for all students, including underrepresented and underserved students, in an atmosphere free of bias, discrimination, and stereotyping.

teach occupational skills and positive work habits while teaching/reinforcing core academic, problem-solving, and critical-thinking skills through the collaboration and joint planning of vocational and academic faculty.

be coordinated and articulated through all educational levels, with close working relationships established among elementary, middle, and secondary schools; regional occupational centers and programs (ROC/Ps); adult schools; and community colleges and other postsecondary institutions.

operate in partnership with business, industry, labor, and government to meet the emerging, changing, and expanding need for well-educated and well-trained technical workers.

provide quality programs and educational excellence for every student.

contribute directly to the economic well-being of individuals and the State, in addition to providing personal satisfaction to individuals and their families.

be relevant and accountable based on standards of quality that are established, implemented, and measured in collaboration with business and industry.

prepare a well-trained, literate, and flexible work force ready to meet the current and future demands of a world marketplace.

Timely implementation of this vision is critical. At present, it is anticipated that there will be a critical skills gap between current and emerging job requirements and the ability of California's work force to meet them.

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The State is in danger of losing its competitive edge in the global marketplace... Now is the time for action.

The State is in danger of losing its competitive edge in the global marketplace, as well as the opportunity to provide a higher standard of living and quality of life for all California residents. Now is the time for action.

What's New in Career-Vocational Education

A vision is not achieved overnight. Although vocational education has existed for more than a century; in recent years such socioeconomic issues as technological change, unemployment, changing demographics, income distribution, global competitiveness, changing attitudes towards the work ethic, and inequality of access and opportunity have had major impacts on the State's economic development, labor market, and the educational system. In order to respond to these challenges, implement the new mission and vision, and remain a relevant, viable part of the economic development of California, career-vocational education has undergone many changes.

Over the last five years, these changes have become apparent in programs throughout the state. Many schools that have begun implementing the changes report a revitalization of their career-vocational education programs. Although this is a good beginning, there is still a long way to go. The vision will not be fulfilled until the changes listed below have become a permanent part of every educational institution in California and career-vocational education:

is an important component of educational reform and recognizes the need for all students to attain higher levels of academic and occupational skills.

teaches and reinforces academic skills that are an integral part of the program and function as a complementary part of a student's education.

provides career awareness and exploration beginning in the kindergarten to develop an awareness in students of the value and importance of work, both to the individual and to society as a whole.

serves students of every ability level. It is recognized that all students, whether college bound or not, need a balanced curriculum that includes both academic/liberal arts and vocational education, collaboratively planned by academic/liberal arts and career-vocational education teachers.

provides students with a broad orientation to career clusters, and develops cluster, core academic, and basic technological skills.

places great emphasis on forming interagency linkages, as well as partnerships, with business, industry, and labor, to improve the quality of career guidance, the curriculum, and instruction for all students and to be more responsive to the needs of employers.

focuses on programs rather than separate or individual courses.

has a career-ladder focus that extends beyond preparation for entry-level employment.

Career-vocational education programs are changing. They have the potential to prepare California's youth and adults to be globally competitive in the current and future work force. The key components are in place. The next step, which will require a major commitment by the total educational system in collaboration with business, industry and labor, is to fully implement and institutionalize quality, articulated career-vocational education programs and services.

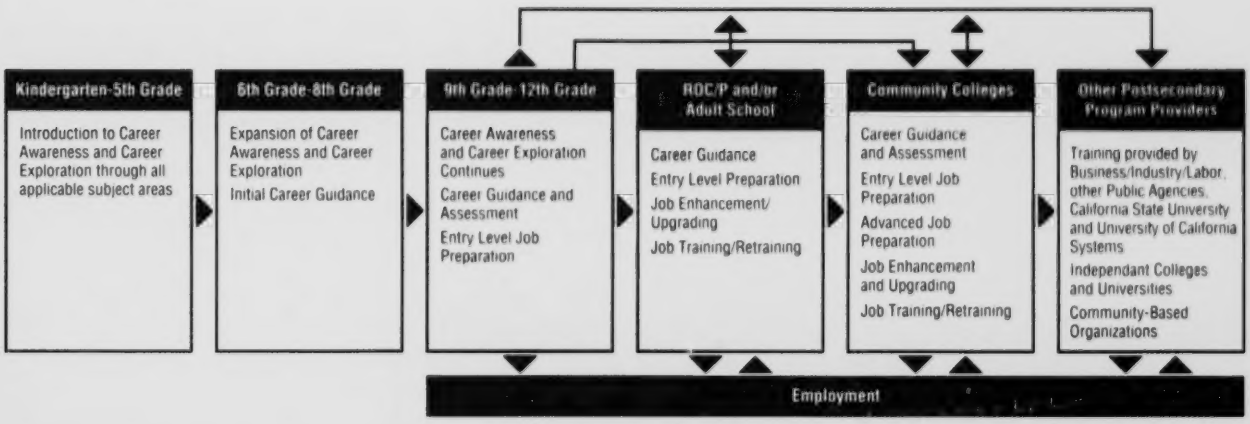
Continuum of Career-Vocational Education

Career-vocational education is a sequence of academic, applied academic, and vocational education courses and related support services that provides students with the competencies, knowledge, and attitudes they need to select, enter, advance, and succeed in their chosen careers. Career-vocational education includes sequential experiences ranging from: initial career awareness and exploration at the K-5 level; to expanded career awareness and exploration with initial career guidance at the 6-8 level; to a career cluster skills focus at the 9-12 level; to job training, retraining, and job enhancement/upgrading in the ROC/P and adult school; to advanced preparation at the community college level. Each of these six educational levels integrates elements of career guidance in all career-vocational education programs and services. This recognizes the need for a system of life-long learning and the fact that most individuals will change careers five or more times. Each educational level includes an emphasis on the knowledge,

Career-vocational education programs...have the potential to prepare California's youth and adults to be globally competitive in the current and future work force.

Figure 4

Continuum of Career-Vocational Education Providers



...it is anticipated that all districts will make significant efforts to move closer to the expected outcomes.

understandings, and skills that are common to all careers and occupations. To provide leadership and direction, the following specifically describes the focus for each of the six educational levels. While it is recognized that what is described here is not currently in place in all schools and colleges throughout the state, it is anticipated that all districts will make significant efforts to move closer to the expected outcomes.

Career-Vocational Education: Focus by Educational Level

K-5 Level

Students are introduced to career awareness and career exploration through instruction in all subject areas. Parents and community members act as resource persons, describing their careers and the products they produce or the clients they serve. Students become aware that people work in order to be self-sufficient and to contribute to society. They begin to develop the ability to interact cooperatively with others, and to understand the relationship between work and quality of life. They learn about a wide variety of jobs and start to: assess their own interests and aptitudes; identify their unique talents and abilities, and develop a sense of self-worth.

6-8 Level

Students continue to expand their career awareness and career exploration in the middle school. They become more aware of how career choices relate to adult lifestyles. They receive initial career guidance as they understand more about their personal aptitudes, abilities, and interests. Students are introduced to basic technological concepts and occupational clusters. They reinforce and expand their application of core academic skills. They identify potential career areas of interest and start to compare education and career requirements to their areas of interest and ability. They begin to understand the role of personal responsibility, good work habits, and the need for careful planning in career selection. Students continue to develop a positive self-concept and an understanding of how all careers and occupations contribute to the well-being of society. Tentative educational/career plans are developed.

9-12 Level

Career awareness and career exploration continue at this level. Students receive additional career guidance and participate in aptitude, interest, and skills assessment. They identify personal values regarding careers and lifestyles, modify their initial educational/career plan to include long-range career goals and the sequence of courses/programs in high school, ROC/P, community

college, and/or four-year college that will enable them to move toward their tentative goals. Students select one or two occupational clusters and enroll in classes designed to help them reinforce core academic skills, develop occupational-cluster skills, and perhaps develop some job-specific skills for entry-level employment or further education and training.

ROC/P Level

The ROC/P level includes both high school and adult students. Career guidance and assessment are provided to help students identify preliminary and advanced career opportunities and update or develop tentative career plans. Students may enroll in programs that provide entry-level job preparation and reinforcement of core academic skills, as well as in programs that prepare them for further education or job training. Others at a more advanced stage may upgrade their job skills or receive total job retraining in order to seek better employment opportunities.

Adult Level

The adult school is designed primarily for adult students and out-of-school youths, although under certain circumstances in-school youth may enroll. Students receive career guidance and assessment, and devise or update their educational/career plans. The focus of career-vocational education in the adult school is on specific vocational training and reinforcement of core academic skills through short-term courses that enable students to upgrade, advance, or change their current employment situations.

Community College Level

At the community college level, career counseling, assessment and vocational programs are available for those who wish to enter the labor market directly, as well as for those who want to prepare for advanced training. The focus of the community college is on short- or long-term career-vocational education programs of a more technical nature than those offered at ROC/Ps or adult schools. Students reevaluate and refine educational/career plans. Many will go directly to work after completing their career-vocational education programs. Some will transfer into a baccalaureate degree program. Others will enroll in career-vocational education programs to upgrade their skills, advance in their careers, or qualify for occupational certification.

The career-vocational education continuum functions as a complementary component of academic/ liberal arts education and is part of the total educational process that helps students relate learning to life. Career-vocational education is not a terminal program for only those students planning to enter the labor market directly from high school; it is for all students, and can provide skills that will assist college students in supporting themselves while completing their

The career-vocational education continuum functions as a complementary component of academic/ liberal arts education and is part of the total educational process that helps students relate learning to life.

...ultimately, the result of all education is to prepare people to successfully enter the work force and function in society.

It is essential that business, industry, and labor be active partners in California's career-vocational education delivery system.

education. Inherent in career-vocational education is the anticipation that, ultimately, the result of all education is to prepare people to successfully enter the work force and function in society. This entails progression over time from entry-level to more advanced jobs. Thus, career-vocational education includes employment-preparation opportunities that lead to career entry, enhancement, or change, and enables students to share in the economic well-being and growth of the state.

Coordination Within the Public Education Delivery System

Career-vocational education instruction is offered in elementary, middle, and secondary schools; ROC/Ps; adult schools; and community colleges. The primary differences between components of the system relate to the depth and scope of career guidance and/or training provided and the clientele served. Program articulation integrates components of the career-vocational education delivery system by providing programs that begin at one level and continue to the next, such as programs that begin in high school or ROC/P, continue in a community college, and may progress to a four-year university. For example, a student completing a high school drafting class with a satisfactory grade may use it as a prerequisite for advanced placement in a certificate or degree program in a community college. The integrated and efficient use of resources through this articulated structure is known as 2+2 (two years of high school plus two years of community college), or as 2+2+2 (two years of high school, plus two years of community college plus two additional years at a four year college or university). It ensures that students are provided with a full range of education services and opportunities without unnecessary duplication, while providing skills needed to enter employment.

Through articulation, all levels of the educational community, including representatives of business and industry, are involved in the planning and development of programs to ensure that coordination of career-vocational education is achieved.

Business/Education Partnerships

It is essential that business, industry, and labor be active partners in California's career-vocational education delivery system. Since a large percentage of employees are recruited from the public schools, business, industry, and labor are direct beneficiaries of the educational system and have a vested economic interest in the State's education and training programs. Students benefit by getting a clear picture of what is expected of them by employers. Often, incentives and assistance are provided to students through these business/education partnerships.

Business/education partnerships help motivate students to do their best and take advantage of the teaching and information resources available in the public and private sector. These include the provision of student and teacher internships in business and the assistance of skilled technical workers who impart their knowledge to students in school or at the work place.

Business/education partnerships allow students to utilize equipment and facilities in the public and private sectors. This results in students learning state-of-the-art techniques on the newest, most modern equipment, which schools could not otherwise afford. Expertise in the area of curriculum is provided by business and industry participants on subject-matter advisory committees.

Business can assist the schools in a variety of ways: by working with local institutions; lobbying State education departments and local school boards for responsive, quality career-vocational education and employment training programs; serving on advisory committees; donating up-to-date equipment; and loaning employees to serve as teachers, mentors, and role models. Employers benefit by ensuring themselves a better trained, more productive work force.

Ways the Plan Can Be Utilized

Local Level

Section II of this document suggests specific local strategies. These should be used to provide direction and leadership for districts, schools, and colleges as they develop, implement, or modify their local/regional action plans to improve career-vocational education. The strategies/activities were developed by six teams of educators, each team representing a particular level of education (K-5, 6-8, 9-12, ROC/P, adult school, and community college) and then synthesized into one listing. Most strategies are applicable to most levels, although the specific activities may vary from one level to another.

Research on school effectiveness and school improvement suggests that the key ingredient for successful change is people. Change and improvement are most likely to occur if everyone involved perceives the advantages to be gained, and is active in the development, implementation, and evaluation of a careful, deliberate plan of action. Improvement plans, however, must also be supported by adequate and targeted resources. Since additional State funds for improvement may not be available, existing federal, State, and local resources need to be identified early in the planning process and coordinated for maximum effectiveness. This will require the close cooperation of each of the educational institu-

Change and improvement are most likely to occur if everyone involved perceives the advantages to be gained, and is active in the development, implementation, and evaluation of a careful, deliberate plan of action.

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tions, working with the advice and support of business and industry. A major step toward achieving the desired results would be the formation of a local/regional career-vocational education planning group. In all likelihood, this planning group would include business, industry, and labor; State and local agency representatives, academic/liberal arts personnel; and career-vocational education providers. Planning efforts will be most successful when they allow sufficient time and participation for all those involved to feel a sense of ownership and responsibility in the ultimate success of the undertaking. Realistic targets and timelines should be set for what can be achieved by a given staff within a specific period of time. The action plan should be reviewed and updated regularly by the local/regional planning group to ensure long-range accomplishments.

State Level

Section II also suggests strategies developed by the State Department of Education and the Chancellor's Office of the California Community Colleges. The two State agencies should develop strategic plans for effective leadership and work with legislators, business, industry, and labor to secure adequate support and coordination of resources to implement the goals of the career-vocational education plan. Additionally, the two may need to establish developmental models to address selected issues of the career-vocational education plan and to provide in-service education to local agencies as they begin to develop and implement their action plans for improving career-vocational education.

SECTION II

Issues, Suggested Strategies and Expected Outcomes

This section of the *Plan* is subdivided into the eleven issues identified in the *California Plan for Career-Vocational Education, Part One: Policy Directions*. There is a brief description of each issue and a recapitulation of the related goals. Following that is an extensive listing of suggested strategies for achieving the goals, and a set of expected outcomes. The Steering Committee recommended priority levels A, B, and C for each of the expected outcomes for consideration by both State and local education agencies. (See Appendix.)

District personnel will review all eleven issues to determine their priority in terms of local career-vocational education programs. For issues of the highest priority, action plans should be developed to address or remediate them. If they are to be effective, local action plans will require the cooperation of personnel at all levels of education and involvement of all segments of the community, including close collaboration with other agencies and with business, industry, and labor representatives.

The strategies suggested for local implementation were developed with significant input from representatives of each educational level. The strategies are suggested, not mandated, and every strategy is obviously not suitable for every level. Career-vocational education personnel are free to select those activities appropriate to their level and implement or modify them according to their student population and local priorities. Thus, although activities will vary from district to district and level to level, the overall focus of effort statewide is the same: to bring career-vocational education to the forefront of educational reform and provide academically rigorous programs that are accountable to the various career-vocational education constituencies and meet both student and employer needs.

Issue #1: Research and Program Planning

In light of the rapid and dynamic changes in the State's economy, technology, labor market, and population, timely and accurate research data are essential to effective planning for career-vocational education. Mechanisms need to be in place that help identify the expectations of employers and determine if those expectations are being met. Research results should be used to establish State and local planning directions and priorities. All providers and users of career-vocational education need to be involved actively in a comprehensive, research-based planning process.

...to be effective, local action plans will require the cooperation of personnel at all levels of education and involvement of all segments of the community...

Goals

Research in career-vocational education will be conducted to provide up-to-date information on student demographics, student needs, socioeconomic trends, labor market demands, and program outcomes, including job placement.

The collection and utilization of research data will be coordinated among those who provide career-vocational education programs and services in the public schools and community colleges.

Planning at the State and local levels will occur on a continuing basis to establish direction and priorities for implementing, operating, and evaluating career-vocational education programs and services.

Representatives of business, industry, and government will be involved in research and planning for career-vocational education programs at all levels of education.

Research data on occupational demands and employer needs at the local, State, and national levels will be obtained through working closely with business, industry, and labor.

Suggested Local Strategies/ Activities to Assist in Program Improvement

Assess student interests, aptitudes, and self-expectations.*

Survey students to determine demographics, student needs, and socioeconomic trends.*

Review and utilize research on strategies to motivate students to enter nontraditional careers.*

Assess parent expectations of students.

Assess faculty awareness of career options, resources, and information available for students.

Review instructional materials to determine currency of information on occupational trends.*

Conduct a longitudinal follow-up study of graduates and non-graduates, to obtain information on employment and/or further education.*

Conduct a follow-up study of employers to determine effectiveness of educational programs and services.*

**These strategies also may be appropriate for other issues.*

- Designate responsibility for coordinating the collection and dissemination of research data on career-vocational education.

- Obtain, analyze, and utilize local, state, and national occupational trends, labor market data, and economic projections in program planning and instruction.

- Coordinate with other area program providers the review and sharing of existing data on student and program information, employer needs, facilities, and community resources. Develop a matrix of career-vocational education programs and services offered. Analyze program and service offerings to insure that appropriate services are available and provided to special-needs students, and to determine if there is unnecessary duplication among program providers.*

- Coordinate local and regional planning to reflect State priorities and directions.*

- Involve business and industry representatives in school-site councils and subject-matter advisory committees to provide input on career and occupational trends and to identify skills for entry-level employment opportunities. Consider a business, industry, or labor representative to chair the committee.*

- Involve representatives of business, industry, and government as classroom resources, as well as participants on curriculum and textbook-evaluation committees.*

- Utilize career-vocational education program and service providers as classroom resources.*

- Include wide representation of career-vocational education program and service providers, as well as representatives of academic/liberal arts disciplines, on all curricular planning and advisory committees.*

- Involve site personnel in district-level planning for the improvement of career-vocational education.*

- Utilize research data in program planning for staff and curriculum development and in planning support services for at-risk students.*

- Provide input to State agencies in establishing statewide directions and priorities.

**These strategies also may be appropriate for other issues.*

Conduct staff development to increase understanding of career and occupational trends, and labor market demands and projections so they will be reflected in the school curriculum.

Conduct staff development focusing on administering, scoring, and interpreting career/vocational preference surveys.*

Determine effectiveness of ongoing career-vocational education programs and services on a systematic basis.*

Provide recognition of business and industry personnel as an incentive to their involvement in school planning.*

Determine the number of students enrolled in and completing various occupational programs and compare to projected labor market demands.

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

Data Collection: By 1991, and annually thereafter, the collection of data and joint planning for the use of those data will be coordinated among all levels of public education; community-based organizations; business and industry; and local, and State agencies.

Research: By 1991, and annually thereafter, research will be conducted - with the assistance of representatives from the education community; business and industry; and local, State, and federal agencies - to provide up-to-date information on population and student demographics; student needs; socioeconomic trends; labor market supply and demand; effective teaching techniques and methodologies; enrollment and retention of underrepresented and underserved students; high-cost programs; partnerships with business, industry, and government; student and employer follow-up; and program, student, and special-project outcomes.

*These strategies also may be appropriate for other issues.

Planning: By 1991, and annually thereafter, planning will occur at the State and local levels - with assistance from representatives of the education community; business and industry; community-based organizations; and local, State, and federal agencies - to establish direction and priorities for implementing, evaluating, and improving career-vocational education programs and services.

Expected Outcomes

A summary of existing data and research pertinent to career-vocational education planning, including the names of appropriate contact agencies, will be published and disseminated.

Joint local career-vocational education plans will be developed on a regional basis in a defined geographic territory, and will take into consideration labor market areas and political boundaries. Planning is based upon mutually agreed goals and priorities.

There will be cooperation among all State-level career-vocational education agencies, employment training agencies, and representatives of business, industry, and government in their data collection efforts, planning processes, and plan development.

Labor market information pertinent to career-vocational education programs will be collected, disseminated, and utilized in planning, implementing, and improving career-vocational education programs. The data are available to all career-vocational education providers, students, parents, business, industry, labor, educators, and other appropriate groups.

Career-vocational education programs reinforce and support academic skills and help students prepare for and achieve personal career goals.

Issue #2: Program Quality and Delivery

Quality career-vocational education programs and services are up-to-date, relevant, and reflective of the values, standards, and requirements of students, local communities, and business and industry. Career-vocational education programs reinforce and support academic skills and help students prepare for and achieve personal career goals.

Goals

- The support and reinforcement of academic skills will be an integral part of career-vocational programs for all youth and adults.
- The career-vocational education curriculum will be relevant and will provide students with skills and knowledge that reflect the current and future work place.
- Career-vocational education programs will be available and responsive to student and employer needs.
- Students enrolled in academic/liberal arts programs will have the opportunity to take career-vocational education courses.
- At the secondary level, appropriate career-vocational courses will be provided that meet State-mandated diploma and graduation requirements.
- There will be flexibility in program design and a timely State program-approval process so that career-vocational education programs and courses may be added or deleted as local conditions and employment opportunities change.
- Career-vocational programs and support services will be developed and implemented so that students at risk may complete their studies and graduate while also developing employability and career-entry skills.
- Career-vocational instructors will remain current with theory and practice in their fields, both as they relate to industry standards and to effective teaching methods.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Utilize subject-matter and service advisory committees to review and validate the curriculum for relevancy and currency and to establish competency outcomes.*

- Incorporate career awareness, exploration, and career guidance activities throughout the curriculum, beginning at the K-5 level, such as those suggested in the *National Career Development Guidelines.*

- Review the curriculum in both academic/liberal arts and career-vocational education to ensure that general employability skills are infused in all courses and programs.

- Survey employers from large businesses and small companies to assess the performance of program graduates and modify the curriculum as necessary.*

- Develop guidelines and measurable competencies for the program quality criteria that can be used in local program-evaluation processes. Include business and industry representatives in the development of these processes.*

- Coordinate with local business and industry to utilize their facilities for on-site training as a part of work experience, community classroom, and/or cooperative career-vocational education.*

- Encourage the use of cooperative learning to develop positive work habits and attitudes, as well as leadership and team-building skills.

- Establish vocational student organizations, where appropriate, as an integral part of the instructional program to foster leadership, citizenship, and interpersonal development.*

- Survey employers and employees to identify and validate occupational and academic skills that should be an integral part of career-vocational education courses/programs.*

**These strategies also may be appropriate for other issues.*

Work cooperatively with academic/liberal arts faculty to develop a matrix of core academic skills taught in career-vocational education courses/programs.

Encourage joint planning between career-vocational education and academic/liberal arts educators to integrate core academic skills into career-vocational education programs and to provide interdisciplinary teaching. As appropriate, incorporate career-vocational education experiences into the academic/liberal arts disciplines.*

Identify career-vocational education courses that meet State or locally mandated graduation requirements.

Provide staff development on the implementation of model curriculum standards and program frameworks. Include business and industry representatives in planning in-service training.

Establish a sequence of career-vocational education and academic/liberal arts courses that leads to or supports a specific profession. Provide this information to students and counselors for use in career guidance and planning.*

Determine the readability level of reading materials and assignments, and emphasize integral problem-solving/critical-thinking skills.

Provide support services for students who need reinforcement of core academic skills.*

Utilize guest speakers from business and industry to promote the importance of academic and general occupational/employability skills, and emphasize the need for these skills in career preparation.

Organize field trips to job sites so that students may observe the skills needed in the work place.

Develop a career plan for each student that includes both academic/liberal arts and career-vocational education courses leading to occupational/professional preparation.*

**These strategies also may be appropriate for other issues.*

Develop and disseminate, to teachers, parents, students and counselors, information about the academic/liberal arts and career-vocational education courses that lead to preparation for various careers. Also include information about the academic graduation credit granted for successful completion of career-vocational education courses and programs.*

Participate in quality reviews, including those conducted by the Western Association of Schools and Colleges, (WASC), on a regularly scheduled basis. Implement action plans developed.

Schedule field trips to local schools, ROC/Ps, and community colleges to observe career-vocational education classes in operation.*

Conduct longitudinal follow-up studies of students and employers to determine adequacy of career-vocational education program and service offerings.*

Invite academic/liberal arts staff, guidance personnel, parents, and students to career-vocational education open houses, career days and career fairs.*

Identify strategies to assist at risk students to successfully complete their career-vocational education programs.*

Provide appropriate support services for students who need assistance, such as supplemental counseling, tutoring, single-parent assistance programs, child care, and peer counseling.*

Utilize outside agencies to make student referrals for support services.

Utilize business and industry representatives as mentors for students and teachers.*

Develop flexible open-entry/open-exit enrollment, partial credit, and challenge-examination policies to encourage retention of at risk students.

**These strategies also may be appropriate for other issues.*

- Provide staff development, in collaboration with academic/liberal arts staff, in instructional strategies that enhance the success of at risk students, such as cooperative learning, peer and cross-age tutoring, and techniques for developing self-esteem.*

- Encourage teacher/student/business partnerships, including job shadowing and summer jobs in business.*

- Encourage and assist local media to report on teacher/ business/student exchanges and their benefit to the community.*

- Provide incentives for teachers and businesses to participate in teacher/business exchanges, such as providing released time and/or providing merit increases for participating teachers and tax incentives for businesses.*

- Use business and industry personnel to teach segments of courses in which they have expertise.*

- Encourage teachers to participate in professional development activities sponsored by professional associations at local, state, and national levels.*

- Schedule career-vocational education classes at a variety of times, including early morning, evenings, and weekends.

- Encourage students enrolled in academic programs to participate in vocational student organizations.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- ***Vocational Student Organizations:*** By 1993, at least 10 percent of the State's career-vocational education programs will implement vocational-student organizations as a methodology for teaching/reinforcing academic core, leadership, citizenship, and occupational skills.

  By 1993, there will be a 20 percent increase in number of chapters from the six vocational student organizations.

- ***Employability and Career-Entry Skills:*** By 1993, all career-vocational education programs and services will be designed to ensure that students, at all levels, including those with special needs and those at risk, are able to master employability and career-entry skills and/or upgrade the skills and competencies required in their chosen occupations.

SDE Unique Strategies/Activities

- ***Career-Vocational Education Program Quality:*** By 1993, 80 percent of the secondary schools and ROC/Ps offering career-vocational education programs will be in the process of implementing the quality criteria for career-vocational education programs.

- ***Career-Vocational Education Model Curriculum Standards:*** By 1993, 80 percent of the career-vocational education programs conducted in the secondary schools and ROC/Ps will be in the process of implementing the student performance standards outlined in the Model Curriculum Standards and Program Frameworks for career-vocational education.

- ***Career-Vocational Education Program Certification:*** By 1993, 50 percent of the career-vocational education programs conducted in the secondary schools and ROC/Ps will receive State Department of Education certification for achieving "excellence" as measured by the quality criteria for career-vocational education programs.

- ***Career-Vocational Education Student Certification:*** By 1993, 50 percent of the students completing a career-vocational education program will receive State-approved certification for successfully passing general employability, core-cluster, and/or job-specific tests.

Alternative Means: By 1993, 80 percent of local secondary districts and ROC/Ps will adopt and implement appropriate career-vocational education courses that serve as alternatives for meeting academic core graduation requirements.

Expected Outcomes

Students at all grade levels will have the opportunity to participate in some phase of career-vocational education.

Assistance will be provided to all students with special needs so they may attain the academic/liberal arts and career-vocational education required for graduation/certification/completion.

Business and industry representatives will participate in the development, maintenance, and periodic evaluation of the career-vocational education curriculum.

All staff will participate in staff development programs that reflect up-to-date industry standards of quality and state-of-the-art instructional methodologies.

The academic rigor of career-vocational education courses will be comparable to that of academic/liberal arts courses.

The educational system will permit the revision, deletion, or addition of programs and courses in a timely manner, so that the curriculum of career-vocational education is responsive to changes in the work place.

Career-vocational education will offer an alternative path for students to complete selected academic requirements for high school graduation.

The State Department of Education will have developed and disseminated a career-vocational education curriculum model for the K-12 grade levels encompassing: an introduction to career awareness and career exploration at the K-5 level that includes parent participation; an expansion of career awareness and career exploration, plus initial career guidance at the 6-8 level; a continuation of career awareness and career exploration at the 9-12 level, with career guidance, assessment and entry-level job preparation.

ISSUE #3: PROGRAM STAFFING

Qualified personnel are the key to quality programs and services. The availability of competent, well-trained, full- and part-time career-vocational education instructors, administrators, and support staff at all levels depends upon aggressive recruitment, adequate salaries, staff development programs, and the active assistance of business, industry, and labor. Career-vocational education personnel should reflect the gender and ethnicity of the student and community population. The staff needs to be sensitive to the needs and cultural diversity of students and effectively use instructional strategies and support services to foster student success. Teacher, counselor, and administrator pre-service and in-service programs will be improved as a result of collaboration between educational colleagues at all levels, including public and private colleges and universities.

Qualified personnel are the key to quality programs and services.

Goals

- Assertive recruitment and training programs will assure the availability of competent and well-trained full- and part-time career-vocational education instructors, administrators, and support staff.
- Career-vocational education staff at all levels will reflect the gender and ethnicity of the student population.
- Career-vocational education staff will be sensitive to and knowledgeable about the unique needs and cultural diversity of students and will employ instructional strategies and support services that ensure student success.
- Career-vocational education personnel will be supported by comprehensive staff development programs that incorporate state-of-the-art skills in instructional methodologies and support services.
- Staff development programs will be used to make all educational staff aware of and knowledgeable about career-vocational program options, career guidance and counseling services, and student job-placement needs.
- Collaboration with public and private colleges and universities will result in pre-service and in-service educational training programs for teachers and counselors consistent with emerging technologies and with statewide policies and goals for career-vocational education.

Collaboration with public and private colleges and universities will result in improved credentialing and staff development programs for teachers and administrators that emphasize instructional skills, program evaluation, and curriculum development.

Career-vocational education staff will communicate with their colleagues at other educational levels on student needs and aspirations.

The expertise and resources of business, industry, and labor will be tapped to provide appropriate pre-service and in-service training and staff development for career-vocational education personnel at all levels.

Suggested Local Strategies/ Activities to Assist in Program Improvement

Utilize a variety of resources, including advisory committees and faculty, to recruit staff with experience in or willing to be trained in career-vocational education programs and services.

Recruit and hire staff who reflect the gender and ethnicity of the student/community population by contacting a variety of community agencies, including gender and ethnic specific groups.

Provide, where possible, coordinated statewide, regional, and local career-vocational education staff development activities.

Using research findings, develop and conduct comprehensive staff development programs on the mission and goals of career-vocational education, instructional methodologies and learning theories, student needs and expectations, methods of working with students who are deficient in basic skills, and staff sensitivity to cultural and ethnic diversity.*

Provide incentives such as released time, and peer and community recognition to support participa-

**These strategies also may be appropriate for other issues.*

tion in staff development activities; e.g., internship programs.*

- Collect, develop, utilize, and disseminate recruitment materials using multi-lingual media that emphasize the unique needs and cultural and ethnic diversity of students.

- Establish specific recruitment activities involving business, industry, and student organizations to promote the teaching of career-vocational education as a career.

- Establish mentoring programs to encourage students to become career-vocational education teachers.

- Work cooperatively with teacher-certification agencies to ensure that personnel have the educational and experiential competencies needed for teaching career-vocational education, and expertise in teaching special-needs students.

- Collaborate with providers of teacher training programs to promote successful teaching strategies that incorporate current/emerging technologies.

- Work cooperatively with teacher training institutions so that programs reflect statewide career-vocational education policies and goals and emphasize the relationship between academic skills and career opportunities.

- Establish partnerships and articulation agreements between career-vocational education programs/services at all levels, including four-year colleges and universities.*

- Conduct interdisciplinary in-service activities for staff to develop strategies that effectively fill unmet student needs and foster a positive working relationship among faculty/staff.*

- Include a wide representation of career-vocational education program and service providers, academic personnel, and business and industry representatives in planning and implementing staff development activities.

- Support implementation of affirmative action hiring policies.

- Establish orientation and mentoring programs for newly hired staff.

- Promote recruitment and hiring of nontraditional role models.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- ***Career-Vocational Education Adequate Staffing:*** By 1990, the State Department of Education and the Chancellor's Office of the California Community Colleges will work in close cooperation with teacher training institutions to prepare an adequate number of career-vocational education staff who are qualified in their assigned program and service area(s) in order to fulfill and carry out federal and State legislative mandates and achieve career-vocational education goals and objectives.

- ***Recruitment Programs:*** By 1993, assertive recruitment activities will be developed and conducted annually to ensure the availability of career-vocational education personnel who are competent and reflective of the gender and ethnic representation of the student population and changing demographics. Education/industry staff-exchange programs will be developed and implemented.

- ***Professional Development:*** By 1990, professional development programs will be planned and conducted annually by career-vocational education staff at the State level in collaboration with post-secondary institutions, business and industry, and professional associations to enable career-vocational education personnel at the local level to remain current with theory and practice in their program and service areas.

Expected Outcomes

- A pool of competent, qualified career-vocational education instructors, administrators, and support staff will be available to meet current and projected needs.

- Staff at all levels will reflect the gender and ethnicity of the student and community population.

- Staff will be aware of and responsive to the unique needs and cultural diversity of all students.

- Staff development programs will incorporate state-of-the-art skills in instructional methodologies.

- Staff at all levels will be aware of career-vocational education program options, counseling and guidance services and job placement needs of students.

- Teacher education programs in public and private colleges and universities will be consistent with statewide policies and goals for career-vocational education and include a focus on emerging technologies.

- Credentialing and staff development programs for teachers and administrators will emphasize curriculum development, instructional methodologies, and program evaluation.

- Student needs and aspirations will be communicated between career-vocational education staff and other educators at all levels.

- Business, industry, and labor will be involved in the development and implementation of pre-service and in-service training.

Issue #4: Delineation of Functions in Program Delivery

To avoid unnecessary duplication of programs and services, there must be delineation of functions among the various providers of career-vocational education. The problem of delineation is particularly acute among those whose programs serve adults and out-of-school youth. Delineation of functions involves not only those in public education who deliver career-vocational education programs and services, but also local and State agencies that offer employment training. If the various functions are clearly delineated, it will strengthen the accountability of all who offer career-vocational education programs, and provide a better environment for cooperation, coordination and collaboration.

To avoid unnecessary duplication of programs and services, there must be delineation of functions among the various providers of career-vocational education.

Goals

- The State Board of Education and the Board of Governors of the California Community Colleges will adopt a policy that provides and supports a continuum of career-vocational education programs and services that avoids unnecessary duplication of effort.

- Coordination of local program planning will occur.
- Accountability mechanisms will be devised to identify and eliminate duplicative and inefficient career-vocational programs and services.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Participate on local and regional planning and articulation committees.
- Encourage and participate in articulated career-vocational education programs and services between different educational levels.*
- Jointly establish local policies on the delineation of functions that reflect State Board and Board of Governors policies.
- Jointly establish and use common-subject-area advisory committees and include them in the regular review of the programs.*
- Using a regional planning committee, jointly identify duplication of career-vocational education programs and services and determine if the duplication is unnecessary.
- Jointly share staff, equipment, and facilities.*
- Cooperatively fund career-vocational education programs and services.
- Provide input in the development of local/regional directories of programs and services.
- Provide input to State agencies and governing boards as appropriate.
- Utilize local and regional planning bodies to develop and disseminate a matrix and description of the services and employment training provided by each of the local, regional, State, and federal entities, including the targeted populations for each provider.
- Utilize local and regional planning bodies to disseminate the roles and responsibilities of each of the local, State, and federal entities relating to local/ regional providers of career-vocational education programs and services and employment training.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **State Policy:** By 1991, the State Board of Education and the Board of Governors of the California Community Colleges will adopt policies that provide and support a full-range and continuum of career-vocational education programs and services that avoid unnecessary duplication of effort.

- **Local Policy:** By 1993, 80 percent of the local educational agencies, ROP/Cs and community college governing boards will adopt policies and implement strategies that support a continuum of career-vocational education programs and services that avoid unnecessary duplication of effort.

Expected Outcomes

- A jointly-developed delineation of functions policy, eliminating unnecessary duplication, will be adopted by the State Board of Education and the Board of Governors of the California Community Colleges. This policy will reflect the services provided by other employment and training providers and will recognize the need for flexibility in local areas.

- Locally developed regional career-vocational education plans and policies will be consistent with policies adopted by the State-level governing boards.

There is a need to increase interagency cooperation and coordination at both the local and State levels...

Issue #5: Interagency Linkage

There is a need to increase interagency cooperation and coordination at both the local and State levels to improve the quality, accountability, and impact of career-vocational education programs and services and to increase the level of support for target populations. A wide array of career-vocational education programs and services in California are administered by autonomous but interdependent public and private entities. In some cases, this has led to a perceived or actual duplication of effort, possibly inefficient use of resources, and sometimes less than optimum program outcomes.

Goals

A full range of education and support services will be provided to students/clients in a timely and effective manner by establishing communication, coordination, and working relationships among and between those who provide federal, State, and local funds for career-vocational education and employment training programs and services in California.

The Joint Advisory Policy Council will coordinate interagency program-policy development between the State Department of Education and the Chancellor's Office of the California Community Colleges, and will interact with other public agencies that offer employment training programs for the development of overall State policy.

State agencies that generate information and provide funding needed for joint program planning, delivery, and accountability will clearly define their roles and responsibilities.

Public schools and community colleges will coordinate program planning and delivery with appropriate agencies to assure that students with special needs are successfully prepared and transitioned into the state's work force.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Use local and regional planning bodies to develop and disseminate a matrix and description of services and employment training provided by each of the local, regional, State, and federal entities, including the targeted populations for each provider.*

- Coordinate career development services at all educational levels with and among human service agencies in California, such as suggested in the *National Career Development Guidelines.*

- Use local and regional planning bodies to disseminate the roles and responsibilities of each of the local, State, and federal entities relating to career-vocational education programs and services and employment training.*

- Participate with career-vocational education related organizations such as Private Industry Councils (PIC), advisory groups to Greater Avenues for Independence (GAIN), local economic development groups, city and county commissions, advisory groups to the Employment Development Department (EDD) and the Employment Training Panel (ETP).*

- Participate in intra- and interagency coordination groups for special-needs populations to ensure that a full range of support services, as appropriate, is available to students.*

- Designate responsibility for facilitating interagency linkage and planning efforts.

- Include representatives from the Private Industry Council (PIC), Greater Avenues for Independence (GAIN) advisory groups, local and economic development groups, city and county commissions, the Employment Development Department (EDD) advisory groups, and the Employment Training Panel (ETP) on common-subject-area advisory committees.

**These strategies also may be appropriate for other issues.*

- Utilize representatives from organizations and agencies related to career-vocational education as classroom presenters, role models, and career-day presenters.*

- Utilize speakers from agencies representing the disabled to talk about overcoming disabilities and succeeding in the work force.

- Provide input to State agencies, as appropriate, to improve the interagency linkage efforts.

- Develop guidelines for establishing effective interagency coordination.

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **State Collaboration Plan:** By 1991, a State-level interagency and intra-agency plan for career-vocational education will be developed and implemented to provide for the collaboration of the State Department of Education; the Chancellor's Office of the California Community Colleges, and other State agencies that set guidelines for or offer career-vocational education and employment training programs and services.

- **Local Collaboration Plan:** By 1993, 50 percent of the local educational agencies, utilizing the State-level interagency and intra-agency plan as a model, will have developed and implemented local interagency plans to assure that access, communication, and shared resources result in cost-effective and efficient programs and services that meet the educational needs of all students.

**These strategies also may be appropriate for other issues.*

Expected Outcomes

- Integrated regional planning groups will be established and will include representatives of all levels of education, with State agencies, business, and industry.
- An integrated regional planning process will result in a full range of career-vocational education programs and services that meet the needs of students and employers, including students with special needs.
- Career-vocational education policies developed by the Joint Advisory Policy Council will reflect the linkage with other public agencies offering employment training programs.
- Information regarding resources available from State and local agencies that fund or assist in joint planning, delivery, and accountability of career-vocational education programs will be disseminated to the field, business, and industry.

Issue #6: Articulation of Programs and Support Services

Articulation is a planned process linking two or more educational systems together to help students make a smooth transition from one level to another. Articulation needs to occur between the providers of career-vocational education programs and services and academic/liberal arts programs within and between schools at all levels. This will ensure that students progressing from one level to the next or transferring from one school to another may do so with minimal disruption or duplication of effort. Articulation requires a careful assessment of course objectives and content, competencies, and support services offered at each grade level from kindergarten through post secondary education. The 2+2 program refers to career-vocational education programs begun in the last two years of high school, regional occupational center/program or adult school, that continue in the regional occupational center/program, adult school, or community college for the next two years. The 2+2+2 program extends that articulation into four-year colleges and universities.

Articulation is a planned process linking two or more educational systems together to help students make a smooth transition from one level to another.

Goals

- Full cooperation will be established among local educational agencies and between different educational levels and disciplines to assure students a smooth transition from one stage of the career-vocational education program to the next.
- The State will provide leadership, technical assistance, and incentives for local agencies to develop articulation programs and agreements at each level of education.
- Local educational agencies will provide for articulation of programs in their annual planning and budgetary process.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Include a commitment to articulation in the mission statements of local education agencies.
- Encourage articulation between and among educational levels, and among academic/liberal arts and career-vocational education personnel.*
- Include articulation activities in the district or regional plan for career-vocational education.*
- Participate on articulation committees.
- Form common career-vocational education subject- and service-area advisory committees for the 9-12, regional occupational center/program, adult education, and community college levels.*
- Encourage cross-disciplinary teaching at and across all levels between academic/liberal arts and career-vocational education faculty.

**These strategies also may be appropriate for other issues.*

- Identify and commit resources, (staff, time, and dollars) to improve local articulation efforts.

- Identify the barriers that impede articulation. Identify the technical assistance and strategies to overcome those barriers. Share information on successful strategies with State agencies.

- Designate a liaison at each level to coordinate efforts to develop articulation agreements.*

- Utilize resource persons such as business/industry and district personnel, who have successfully implemented articulation agreements to assist in the development of local articulation efforts.

- Request information about local, regional, and State incentives for developing and implementing articulation agreements and apply for those incentives.

- Plan and implement appropriate articulation agreements for all career-vocational education programs and services.*

- Develop and implement a coordinated and sequential career-vocational education curriculum for K-postsecondary education that can be delivered in a cost-efficient manner.

- Include both high-school age and adult students in articulated programs.

- Develop and implement a student tracking system that identifies students progressing through and completing articulated programs and services.

- Implement policies that permit teachers access to student records in order to utilize student diagnostic information in planning effective teaching strategies to meet individual needs.*

- Develop articulation and advanced placement agreements among secondary schools, regional occupational centers/programs, adult schools, community colleges, and four-year colleges and universities. Agreements should address the transferability of courses and credit, student participation, support services, retraining needs, and shared facilities, staff, and equipment.

**These strategies also may be appropriate for other issues.*

- Provide coordinated career guidance between educational levels. Include information about available career-vocational education programs and services and their prerequisites.

- Incorporate career guidance as an integral part of all career-vocational education programs and services as suggested by the *National Career Development Guidelines.* *

- Participate in local, regional and State-sponsored articulation meetings, workshops, and conferences.*

- Encourage sharing of faculty, equipment, facilities, and information about articulating programs between levels.*

- Encourage faculty and students of all levels to visit career-vocational education programs and services offered at other educational levels.*

- Conduct joint academic and career-vocational education workshops on faculty planning, curriculum development, and staff development for teachers, counselors, and administrators of all levels.*

- Conduct career days to provide students with information about various career ladders. Use such events to highlight articulated programs.*

- Evaluate articulation efforts and disseminate materials describing successful articulated programs to students, counselors, parents, faculty, business, and industry.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Articulation:** By 1993, facilitate the development, improvement, and expansion of articulation through various methods, including technical assistance, staff development, and developmental seed funding, so that at least 60 percent of the secondary school districts, regional occupational centers/programs, adult schools, and community colleges will have executed and implemented articulation agreements between educational levels, including four-year institutions. The assistance of business and industry will be sought to assure that articulated programs address labor market needs.

Expected Outcomes

- Local coordinating committees composed of career-vocational education deliverers (K-12, ROP/C, Adult and CC), and representatives of the employer community and the four-year State college and university system, where appropriate, will be established to develop, implement, periodically evaluate, and revise area articulation plans.

- The State will provide incentives for local agencies to develop and implement their area articulation plan.

- Local plans and budgets of participating educational providers will include adequate funding for personnel, including instructors and administrators, to participate in all phases of articulation.

There is a need for the employment community to be a full partner in planning, delivering, and evaluating career-vocational education programs...

Issue #7: Employer Linkage

There is a need for the employment community to be a full partner in planning, delivering, and evaluating career-vocational education programs as rapid and dramatic changes occur in technology, employment practices, and occupational patterns. Linkages between education and the employment community will benefit education by improving the quality and accountability of career-vocational education programs and services. This, in turn, will benefit employers by developing a work force with the academic, critical-thinking, problem-solving, and occupational skills essential for success in the work place now and in the future.

Goals

- Effective communications and partnerships with employers and labor will improve the planning, delivery, and evaluation of career-vocational education programs and services.

- Education's partnership with employers and labor will develop human resources through exchanges in which career-vocational education instructors can return to business and industry to update their skills while workers can provide expertise and form an adjunct instructor pool that can strengthen program content and training.

- A partnership of educators, employers, and labor will utilize public and private training facilities, equipment, and expertise to increase student interest and participation in career-vocational education and help ensure the availability of a well-trained work force.

- Career-vocational education will be an active participant in local, regional, and State economic planning and development.

- Employers will be encouraged to provide incentives for qualified students to pursue career-vocational education through scholarships, grants, and special recruitment opportunities for employment.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Establish regional coordinating committees that include representatives of business, industry, and labor. Identify priorities for planning, developing, or modifying career-vocational education programs and services.

- Establish linkages and participate with agencies involved in local, regional, and State economic development efforts.

- Include representatives of business and industry on all subject-matter advisory committees to assist in planning, delivery, and articulation of career-vocational education programs and services. Recommend a business or industry person as committee chair.*

- Involve business and industry representatives in the delivery of career development competencies such as those suggested in the *National Career Development Guidelines*.

- Designate a liaison at each level to coordinate linkages between school, business, and industry groups.*

- Regularly survey local business and industry for labor market information related to local needs, future projections, technological changes, and related data.*

- Develop a regional database that includes a listing of available career-vocational education programs and support services.*

- Involve business and industry representatives in establishing and implementing a systematic follow-up process to evaluate career-vocational education programs and services.*

- Involve representatives of business and industry, especially women, minorities, and career-vocational education graduates, as guest speakers to discuss career options, the relationship between work and school, and job opportunities.*

- Encourage representatives of business and industry to participate on a regional level in business-education partnerships.*

- Utilize business and industry sites for field trips and open houses to inform students and the community of career options and job opportunities.

**These strategies also may be appropriate for other issues.*

- Establish teacher-business exchange programs that include employers mentoring students, employers participating directly in the classroom, and teacher and student interning at business/ industry sites where applicable.*

- Develop incentives for staff to update their skills to reflect business and industry standards by participating in business/ industry-based courses and inservice training.

- Encourage faculty to participate in local service clubs, professional and labor organizations, and business and industry groups.*

- Conduct joint staff development between education, business, industry, and labor.*

- Establish a system for identifying qualified employees from business and industry interested in full- or part-time career-vocational education teaching, and develop a process for utilizing them in the school system.*

- Identify public and private facilities that potentially might be used for on-site training, and establish joint/cooperative-use agreements for those facilities.

- Involve employers in identifying and overcoming existing barriers to the employment of students with special needs.*

- Develop industry-specific training programs to provide for the continuing education/training needs of employers.

- Encourage employers to offer hiring preference, grants, and scholarships for promising students and underrepresented and underserved populations to enroll or stay enrolled in career-vocational education and pursue a career in business and industry.

- Encourage local educational agencies to use county wide job bank data.

- Encourage employers to utilize district placement services in their recruiting activities.

- Publicize business and industry participation in educational efforts through newspaper, radio, and television stories, appropriate brochures, and recognition awards and dinners.*

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Partnerships**: By 1993, the State Department of Education and the Chancellor's Office of the California Community Colleges will form partnerships at the statewide level with business, industry, labor, and the community. Local educational agencies will be encouraged to form similar partnerships.

- **Incentives to Employers**: By 1993, a system will have been developed that provides incentives to employers to support career-vocational education through participation in planning, staff development, implementation, and evaluation of career-vocational education.

- **State and Local Development:** By 1994, career-vocational education will develop strategies to encourage linkages with parents, community-based organizations, and minority business communities to: increase the partnership between career-vocational education and business, industry, and the community; train career-vocational educators on the knowledge and skills needed to effectively serve all students; and broaden access to career-vocational education programs and services.

Expected Outcomes

- Every educational provider in a career-vocational education plan will have ongoing, structured partnerships with employers and labor resulting in high-quality, relevant programs and services.

- Local career-vocational education providers and employers will share personnel and facilities to optimize their utilization.

- State, regional, and local economic development organizations will include representatives of career-vocational education in their planning and service delivery.

- Local career-vocational education plans will include the participation of employers in providing incentives for students, such as work experience, grants, scholarships, and employment opportunities.

School/employer partnerships will be expanded to include broad-based representation of all segments of the business community.

Local coordinating committees will review the performance of school/employer partnerships.

All students must have access to career-vocational education, regardless of their ethnic and/or cultural background, gender, academic and economic background, disability, or age.

Issue #8: Student Access and Retention

All students must have access to career-vocational education, regardless of their ethnic and/or cultural background, gender, academic and economic background, disability, or age. Inherent in access is the assurance that efforts will be made to retain students and to assist them in successfully completing the programs of their choice. This requires the provision of comprehensive, bias-free career awareness, exploration, and guidance and counseling services, as well as needed support services, including tutoring, child-care, and/or transportation. Access also includes assisting students in meeting the prerequisites for specific career-vocational education courses in a timely manner. Students -and where appropriate, parents - must receive accurate and current career/job market information to enable them to make realistic career and program choices.

Goals

Current, accurate, and unbiased career information appropriate to each grade level will be provided to all students, enabling them to make informed educational choices and career plans that lead to realistic career goals.

A continuum of comprehensive career guidance services and technical assistance appropriate to each grade level will be provided to students. All assessment instruments and procedures will be free of bias.

Recruitment efforts will reflect affirmative action goals and will be directed toward underrepresented and underserved groups, in addition to the general student population.

Opportunities will be provided for all students to enroll, participate, and succeed in career-vocational education appropriate to their grade level, regardless of gender, age, disability, and ethnic, cultural, or economic background.

Support services essential to student access, retention, and success in career-vocational education will be provided.

Teachers and counselors will encourage, advise, and assist all students in making realistic educational decisions and informed career choices.

To ensure access, retention, and success, career-vocational education programs will provide options for at risk students and special populations through support services such as tutoring, child care, transportation, flexible enrollment and scheduling, and financial aid.

Suggested Local Strategies/ Activities to Assist in Program Improvement

Develop and implement a student recruitment plan with special emphasis on underrepresented and underserved populations.

Include in the local plan opportunities for career-vocational education students, graduates, teachers, counselors, and employers to participate in a variety of recruitment activities such as career/college days and field trips, with a focus on non-traditional careers.

Identify and disseminate a list of career information resources to counselors and career-vocational education personnel for student advisement and counseling.*

Provide needed assistance to students from underrepresented and underserved groups to facilitate their enrollment and success in career-vocational education programs.*

Involve professional organizations, educational institutions, business, industry, and labor, in providing current career and job market information.*

Encourage the adoption and implementation of the *Vocational Assessment Model for Students Served by Educational and Job Training Agencies.*

Provide students with current information on career/job opportunities and training and promote enrollment in programs leading to nontraditional careers.

Provide career awareness, exploration, and guidance, including assessment services, to assist students in making informed educational and career choices.*

**These strategies also may be appropriate for other issues.*

Assist students in developing and regularly updating individual education/career plans.*

Establish and implement a process for early identification of students at risk and develop appropriate intervention strategies.*

Develop incentives to encourage the use of teaching methods that have been demonstrated to be effective in accommodating students' varied learning styles.

Articulate career-awareness, exploration, and guidance and counseling programs and services with other educational levels to encourage the sharing of resources.*

Integrate career guidance and counseling into appropriate subject-matter areas to interest students in early career planning, as suggested in the *National Career Development Guidelines*.

Provide instruction in general employability (job readiness) skills through both academic/liberal arts and career-vocational education courses.

Evaluate progress in increasing access and retention of culturally diverse, underrepresented, and underserved students into career-vocational education programs, and develop appropriate intervention strategies as necessary.*

Collect and maintain information on completion and transfer rates of students from one school level to the next.*

Establish and initiate flexible schedules to accommodate special needs of students.*

Coordinate with local and State agencies in designing and implementing appropriate support services, such as tutoring, child care, transportation, community referrals, and financial aid, to promote retention of underrepresented and underserved students. Publicize the availability of these support services to students, parents, and staff.*

**These strategies also may be appropriate for other issues.*

- Provide joint academic/liberal arts and career-vocational education staff development activities that focus on cultural, linguistic, and cognitive learning styles and available support services to encourage student retention.*

- Encourage faculty involvement in student advisement.

- Provide bilingual aides to assist students with limited-English proficiency in work experience education and other career-vocational education programs.

- Provide staff development on the most effective ways to utilize instructional aides and support services to promote the success of special-needs students.

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Career-Vocational Education Scope and Content:** By 1993, facilitate the provision of support services essential for student recruitment, access, placement, transfer, retention, and success in career-vocational education through various methods, including technical assistance, staff development, and funding. Special attention will be directed to underrepresented, underserved, and special student populations. In response, California public schools and community colleges will have broadened the scope and diversified strategies for presenting career-vocational education instruction, activities, and services to better accommodate the interests, abilities, and needs of all students.

SDE Unique Strategies/Activities

- **Assessment and Program Placement:** By 1993, the State Department of Education will offer technical assistance to encourage all of California's secondary public schools and regional occupational centers/programs to adopt the *Vocational Assessment Model for Students Served by Educational and Job Training Agencies.*

Expected Outcomes

- Students will make informed educational choices and career plans using current, accurate, and objective information.

**These strategies also may be appropriate for other issues.*

...a comprehensive public information program emphasizing career-vocational education as an integral component in the total educational system must be developed, implemented, and maintained...

All students will receive career-awareness, exploration, and guidance services that utilize bias-free assessment instruments and procedures.

Enrollment patterns in career-vocational education programs will be consistent with affirmative action goals and community demographics.

Opportunities will exist for all students to participate and succeed in career-vocational education programs.

All career-vocational education students will be provided support services essential for access, placement, transfer, retention, and success.

Issue #9: Public Awareness

In an effort to position career-vocational education to be successful, and to gain the support of legislators, policy makers, students, parents, employers, the general public, and the education community, a comprehensive public information program emphasizing career-vocational education as an integral component in the total educational system must be developed, implemented, and maintained at both the State and local levels. The promotional program must provide information about the significant accomplishments and benefits of career-vocational education to students and its contribution to California's economic viability.

Goals

The public will be made aware of the opportunities available in career-vocational education programs and services.

Career-vocational education will be accepted as an equal and integral component of the mission of California's public education system.

The positive impact of career-vocational education on the student's well-being and on the economic development of the community and the state will be demonstrated through public awareness and support of the programs and services.

Suggested Local Strategies/ Activities to Assist in Program Improvement

Utilize a local and regional planning body to develop a comprehensive public-awareness plan, including regular news releases disseminated to the public through school and community media/ resources. Assign responsibility for coordinating the local and regional public-awareness program/plan.*

Include career-vocational education as a part of the mission statement of local educational agencies.

Identify and publicize exemplary career-vocational education students, teachers, programs, and services.

Publicize positive client outcomes of competencies.

Publicize career-vocational education as an effective instructional strategy for teaching and reinforcing the core academic curriculum.

Promote the accomplishments of career-vocational education in narrowing the skills gap between job requirements and employee preparedness.

Promote career-vocational education programs and services to the public, including information about the benefits and opportunities of career-vocational education, its place in the global perspective of education, and its economic impact on society.

Publicize the contributions of career-vocational education in helping to solve urgent social problems by preparing youth and adults to enter the work force.

Promote school visitations and open houses for career-vocational education programs and services.*

Utilize a variety of media to publicize the results of follow-up studies and of individual student successes, highlighting the successes of those engaged in non-traditional careers.*

*These strategies also may be appropriate for other issues.

- Publicize results of student leadership activities, including vocational student organizations.

- Promote active involvement of career-vocational education staff on councils, advisory boards, and boards related to education to ensure inclusion of career-vocational education in local program and service plans.

- Make presentations about career-vocational education to service and community organizations, PTA meetings, school boards, and other education groups. Emphasize the positive effect of career-vocational education programs on dropouts and truancy.

- Publicize the outcomes that are occurring as a result of regional planning.*

- Inform the community and social service agencies about the career-vocational education services available to teenage parents, single parents, and displaced homemakers.

- Implement and publicize a recognition program for students who have excelled in various aspects of career-vocational education.

- Publicize business, industry, and government involvement in and support of career-vocational education programs and services, including commitments and donations.*

- Encourage service and community organizations and advisory committees to promote career-vocational education as an equal and integral component of California's public education system with the Legislature, Governor, Chancellor, Superintendent of Public Instruction, State Board of Education, and Board of Governors.

- Encourage legislators to support and fund career-vocational education as an equal and integral component of California's public education system.

- Provide appropriate input to the development of a statewide public-awareness program.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Public Information Program**: By 1993, a comprehensive career-vocational education public information program, including a clearinghouse for information, will result in increased awareness of opportunities in career-vocational education, financial support, student participation, and acceptance of career-vocational education as an equal and integral component of the education system.

Expected Outcomes

- The role of career-vocational education programs as an integral and complementary part of the total educational process will be accepted and understood by students, educators, parents, policy-makers, media, and the public.
- The public is aware of opportunities available at all levels of career-vocational education, as well as its contribution to the personal and economic well-being of students and the economic development needs of the state.
- The public is aware of the accomplishments of career-vocational education as measured by a comprehensive accountability program that demonstrates the contribution of career-vocational education to the economic development needs of the state.

State and local accountability efforts need to be comparable, compatible, and consistent.

Issue #10: Program Accountability

Program accountability is the formal process of reviewing and measuring the outcomes of career-vocational education programs and services offered by all providers. Accountability requires the development and application of agreed-upon standards, data elements, definitions, and measures of performance effectiveness based on these standards, which are appropriate to the type and level of career-vocational education programs being offered. State and local accountability efforts need to be comparable, compatible, and consistent.

Goals

- Program effectiveness will be measured in a systematic manner, using quality standards and indicators appropriate to the various levels and types of career-vocational programs and services.
- There will be comparable and compatible career-vocational education information systems to collect, analyze, and report, in a timely and accurate manner, data on program enrollments, student characteristics, student goals, and program outcomes that will provide a basis for assessment, planning, and decision making at the State, regional, and local levels.
- Effective community participation, including representation from employers and labor, will be used to establish quality and performance standards for assessing career-vocational education at all levels.
- The effectiveness of career-vocational education programs and services will be measured by student attainment of defined program competencies, job placement, job upgrade, career change, and transfer to advanced training, as well as satisfaction of employer needs and expectations.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Seek involvement of the local/regional planning body, business and industry representatives, and parents in developing an evaluation system and instruments that measure program effectiveness appropriate to the educational level. Integrate this system with other, ongoing evaluation systems.

- Use inter-level common-subject-area advisory committees to assist in evaluating career-vocational education programs using established standards. Verify that local evaluation efforts are consistent with State standards.*

- Identify desired student competencies for each program and maintain records of career-vocational education student progress in attaining those competencies.*

- Identify the goals and expectations of career-vocational education students, and measure their goal attainment.

- Regularly review career-vocational education programs and services to determine whether they are adequate and meet identified labor market needs.*

- Conduct student and employer follow-up to assess program appropriateness and identify needed program improvements.*

- Compile student follow-up and placement reports and use them in planning.*

- Participate in compliance and quality reviews on a regularly scheduled basis, using the results to make program improvements.*

- Use consistent definitions for identifying and serving students with special needs.

- Participate in the State's program-certification process, using established program-quality criteria and State model-curriculum standards and program frameworks.

- Work cooperatively with licensing agencies to determine the number of students who complete career-vocational education program and receive appropriate licenses.

- Provide certificates of proficiency to all students who successfully complete a career-vocational education program.

- Develop accountability mechanisms that assess program expenditures, enrollments and completions, outcomes, and effectiveness in relation to established State program standards.*

- Support efforts to include career-vocational education quality indicators as a part of the performance report for California schools.

**These strategies also may be appropriate for other issues.*

- Provide input to the State regarding accountability data to be collected and supply those data as requested.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Comprehensive Programs/Services Accountability**: By 1991, a system will be developed, implemented, and used annually to measure the quality of career-vocational education programs and services offered by eligible recipients.

- **Administrative Accountability**: By 1991, and annually thereafter, a system will be in operation that measures eligible recipients' compliance with federal and State laws, rules, and regulations.

- **Fiscal Accountability**: By 1991, and annually thereafter, a system will be in operation that measures eligible-recipient adherence to expenditure requirements of federal and State laws, rules, and regulations.

Expected Outcomes

- Verifiable and timely statewide quality and performance standards for all levels will measure the results and effectiveness of career-vocational education programs and services.

- Incentives will be available at all levels to improve the quality and effectiveness of career-vocational education programs and services.

- Program accountability results will be used as the basis for assessment, planning, decision making, and program improvement at the State and local levels.

**These strategies also may be appropriate for other issues.*

Issue #11: Program Funding

Adequate, stable, and predictable funding is critical to assure the availability and quality of career-vocational education in California. Current, limited career-vocational education resources must be utilized optimally if student and employer needs are to be met. Additional resources including newly appropriated dollars or reprioritization of existing dollars must be made available for program providers to meet the demands created by new and changing technologies.

Goals

- Adequate, stable, and predictable funding will enable career-vocational education to fulfill an expanded role and respond to changing technologies and market place demands as it works to meet the needs of individual students and employers for training and retraining workers.
- Additional resources will be made available so that program providers can meet new and expanding goals.
- Funding for career-vocational education will be sufficient to keep the instructional personnel, curriculum, facilities, and equipment current, and to address the demands posed by changing and emerging technologies.
- Incentives will be available to employers that will increase their participation in and support of local career-vocational education and employment-training programs.

Suggested Local Strategies/ Activities to Assist in Program Improvement

- Elicit support of the local community, including area legislators, in communicating the need for adequate and stable funding of career-vocational educational programs and services to the Legislature, Governor, business and industry, and trade and professional associations.
- Identify, coordinate, and utilize the various sources of funding appropriate for career-vocational education.
- Encourage contributions from business and industry to supplement local funds and to serve as a match for special funds. Jointly develop long-range plans for funding career-vocational education programs.

Adequate, stable, and predictable funding is critical to assure the availability and quality of career-vocational education in California.

- Encourage local support for career-vocational education programs by supporting tax and bond issues.
- Implement and publicize an employer-recognition program that highlights business and industry's financial contributions to local career-vocational education programs.
- Identify and document excess costs associated with serving special-needs students in career-vocational education programs and services.
- Develop and implement joint programs to share the additional cost of facilities, staff, and equipment among business, industry, private foundations, and career-vocational education providers at other educational levels.*
- Coordinate fund-raising efforts and leverage program funding through utilization of regional planning councils representing all educational levels.*
- Use advisory committees to identify program needs and to assist in soliciting additional resources such as equipment, materials, and facilities.*
- Encourage the Legislature and Governor to enact legislation that provides tax incentives to employers who actively participate in career-vocational education programs.
- Provide staff development activities focusing on the availability and coordination of funding sources appropriate to career-vocational education, and in grant-writing strategies.
- Request the State Department of Education, the Chancellor's Office of the California Community Colleges, the Legislature, and the Governor to review the current funding cap and Average Daily Attendance (ADA), and make provisions for flexibility to meet unanticipated local needs.

**These strategies also may be appropriate for other issues.*

State Department of Education and Chancellor's Office, California Community Colleges

Common/Joint Strategies/ Activities

- **Adequate Funding**: Annually, the State Department of Education and the Chancellor's Office of the California Community Colleges will work with representatives of business and industry, the Legislature, and the Governor to secure adequate State and federal funds that will enable the State to carry out the career-vocational education mission, mandates, and plans, and provide stable career-vocational education funding for local educational agencies.

Expected Outcomes

- Career-vocational education funding will be adequate, stable, and predictable.

- Resources will be provided to keep personnel, curriculum, facilities, and equipment current; to address changing and emerging technologies; and to meet new labor market demands and expanded goals.

- Incentives are provided to encourage employers to contribute to career-vocational education programs and services.

SECTION III

Summary and Conclusions

The foregoing strategies and activities suggested to achieve the expected outcomes for each of the eleven issues constitute a full agenda. The basic objective is for career-vocational education to be a critical component in the mission of education today, providing all students with a balanced program that includes both academic/liberal arts and vocational courses to match their interests, career goals, and learning styles. Implementing the strategies suggested in this document will require strong, ongoing partnerships with all segments of the career-vocational education community: business, industry, labor, institutions of higher education, and other related city, county, regional, and State agencies. Implementing the *California Plan for Career-Vocational Education, Parts One and Two*, will provide California's students with high-quality career-vocational education programs and services in which they can acquire positive work attitudes and academic, general employability, and job specific skills. These attitudes and skills will lead to enriched options for individual and family well-being, self-sufficiency, and the opportunity to make a significant contribution to the economic development of the state.

Career-vocational education faces significant challenges. The past vocational education focus of providing only "job specific skills," which began in 1917 with the passage of the Smith-Hughes Act, has been replaced by a newer structure of broader educational experiences. Today, career-vocational education must be dynamic and responsive to continuing changes in technology, occupational trends, demographics, and social values. At the same time, the new focus for the reform of career-vocational education must include cooperative planning between academic/liberal arts and career-vocational education personnel; effective linkages between business, industry, labor and education; a shift to an instructional focus that recognizes the need for increased academic and critical thinking skills; equity and excellence for the growing population of students at risk of school failure; and reduction of the school dropout rate. Today, career-vocational education programs must be sufficiently comprehensive in scope and content to maximize an individual's ability to adapt to constantly changing technologies and labor market needs. At all levels, education must emphasize the dignity of work and the worthiness of all occupations.

Local, regional, and State educational agencies, with the active involvement of business and industry, will need to fully address all eleven issues detailed in the *Plan* if career-vocational education is to be an effective,

The basic objective is for career-vocational education to be a critical component in the mission of education today, providing all students with a balanced program that includes both academic/liberal arts and vocational courses to match their interests, career goals, and learning styles.

A priority in addressing all of these issues is the formation of regional planning groups to coordinate and articulate career-vocational education programs and services.

integral part of the total educational process. To accomplish this will require adequate, stable, and predictable funding, including the reprioritization and coordination of existing funds. It is certain that additional funding also will be necessary. A resolution regarding delineation of functions is critical and should involve all career-vocational providers, including every local and State agency that offers employment training. Clearly delineating the functions of career-vocational education providers will strengthen the accountability of career-vocational education programs and result in significant improvement.

A priority in addressing all of these issues is the formation of regional planning groups to coordinate and articulate career-vocational education programs and services. This will ensure that individuals can enroll in state-of-the-art educational programs and move through the system with a minimum amount of duplication or overlap in learning. It will also better ensure that career-vocational education programs and services will meet the needs of business and industry for employees who are highly skilled, flexible, and able to adapt to new and evolving technologies.

Career-vocational education programs have changed and must continue to change. The necessary components, which have the potential to prepare California's citizens for global competitiveness, must be put in place. This is a call for action and it is nothing less than an appeal for the future. Our efforts are an attempt to provide a legacy by which people may participate and share in the general welfare of the State. The creation of exemplary career-vocational education programs and services functioning in close cooperation with business and industry, responsive to labor market needs, and serving all students, will be an investment that will effect the work force in the year 2000 and beyond, ensure the economic viability of California, and maintain our state, national and global competitiveness in the years to come.

APPENDIX

California Plan for Career-Vocational Education

Part Two: Implementation Strategies

Results of Prioritizing Expected Outcomes (Section II)

These are the results of prioritizing the expected outcomes, as recommended by the Steering Committee. The committee recognized that while all the expected outcomes are important, it is not possible to give priority to 50 areas simultaneously. Outcomes prioritized at level "A" should be considered urgent and incorporated into operational plans of the State Department of Education and the Chancellor's Office of the California Community Colleges. Outcomes prioritized at level "B" should be considered critical and become the next area of focus. Outcomes prioritized at level "C" should be last to receive attention.

"A" Priorities

Delineation of Function: A jointly-developed delineation of functions policy, eliminating unnecessary duplication, will be adopted by the State Board of Education and the Board of Governors of the California Community Colleges. This policy will reflect the services provided by other employment and training providers and will recognize the need for flexibility in local areas.

Employer Linkage: Every educational provider in a career-vocational education plan will have ongoing, structured partnerships with employers and labor resulting in high quality, relevant programs and services.

Program Funding: Career-vocational education funding will be adequate, stable, and predictable.

Program Quality and Delivery: The State Department of Education will have developed and disseminated a career-vocational education curriculum model for the K-12 grade levels encompassing: an introduction to career awareness and career exploration at the K-5 grade level that includes parent participation; an expansion of career awareness and career exploration, plus initial career guidance at the 6-8 level; a continuation of career awareness and career exploration, at the 9-12 level with career guidance, assessment, and entry-level job preparation.

Program Accountability: Program accountability results will be used as the basis for assessment, planning, decision making, and program improvement at the State and local levels.

Public Awareness: The role of career-vocational education programs as an integral and complementary part of the total educational process will be accepted and understood by students, educators, parents,

policy-makers, media and the public at large.

Program Staffing: A pool of competent, qualified career-vocational education instructors, administrators, and support staff will be available to meet current and projected needs.

Articulation of Programs and Support Services: Local coordinating committees composed of career-vocational education deliverers (K-12, ROP/C, Adult and CC), and representatives of the employer community and the four-year State college and university system, where appropriate, will be established to develop, implement, periodically evaluate, and revise area articulation plans.

Research and Program Planning: There will be cooperation among all State-level career-vocational education agencies, employment training agencies, and representatives of business, industry, and government in their data collection efforts, planning processes, and plan development.

Interagency Linkage: Information regarding resources available from State and local agencies that fund or assist in joint planning, delivery, and accountability of career-vocational education programs will be disseminated to the field, business and industry.

Student Access and Retention: Opportunities will exist for all students to participate and succeed in career-vocational education programs.

Program Quality and Delivery: The academic rigor of career-vocational education courses will be comparable to that of academic/liberal arts courses.

Program Funding: Resources will be provided to keep personnel, curriculum, facilities, and equipment current; to address changing and emerging technologies; and to meet new labor market demands and expanded goals.

Public Awareness: The public is aware of opportunities available at all levels of career-vocational education, as well as its contribution to the personal and economic well-being of students and the economic development needs of the state.

Public Awareness: The public is aware of the accomplishments of career-vocational education as measured by a comprehensive accountability program that demonstrates the contribution of career-vocational education to the economic development needs of the state.

Program Quality and Delivery: Students at all grade levels will have the opportunity to participate in some phases of career-vocational education.

Student Access and Retention: All career-vocational education students will be provided support services essential for access, placement, transfer, retention, and success.

Program Accountability: Verifiable and timely state-wide quality and performance standards for all levels will measure the results and effectiveness of career-vocational education programs and services.

Program Quality and Delivery: Career-vocational education will offer an alternative path for students to complete selected academic requirements for high school graduation.

Interagency Linkage: Integrated regional planning groups will be established and will include representatives of all levels of education, with State agencies, business, and industry.

"B" Priorities

Research and Program Planning: Labor market information pertinent to career-vocational education programs will be collected, disseminated, and utilized in planning, implementing, and improving career-vocational education programs. The data are available to all career-vocational education providers, students, parents, business, industry, labor, educators, and other appropriate groups.

Student Access and Retention: All students will receive career awareness, exploration and guidance services that utilize bias-free assessment instruments and procedures.

Research and Program Planning: Joint local career-vocational education plans will be developed on a regional basis in a defined geographic territory, and will take into consideration labor market areas and political boundaries. Planning is based upon mutually agreed goals and priorities.

Program Quality and Delivery: Business and industry representatives will participate in the development, maintenance, and periodic evaluation of the career-vocational education curriculum.

Program Quality and Delivery: All staff will participate in staff development programs that reflect up-to-date industry standards of quality and state-of-the-art instructional methodologies.

Program Quality and Delivery: The educational system will permit the revision, deletion, or addition of programs and courses in a timely manner, so that the curriculum of career-vocational education is responsive to changes in the work place.

Program Accountability: Incentives will be available at all levels to improve the quality and effectiveness of career-vocational education programs and services.

Program Funding: Incentives are provided to encourage employers to contribute to career-vocational education programs and services.

Research and Program Planning: A summary of existing data and research pertinent to career-vocational education planning, including the names of appropriate contact agencies, will be published and disseminated.

Employer Linkage: Local coordinating committees will review the performance of school/employer partnerships.

Program Staffing: Business, industry, and labor will be involved in the development and implementation of pre-and in-service training.

Program Quality and Delivery: Assistance will be provided to all students with special needs so they may attain the academic/liberal arts and career-vocational education required for graduation/certification/completion.

Program Staffing: Staff at all levels will be aware of career-vocational education program options, counseling and guidance services and job placement needs of students.

Articulation of Programs and Support Services: Local plans and budgets of participating educational providers will include adequate funding for personnel, including instructors and administrators, to participate in all phases of articulation.

Program Staffing: Staff will be aware of and responsive to the unique needs and cultural diversity of all students.

Program Staffing: Staff development programs will incorporate state-of-the-art skills in instructional methodologies.

Interagency Linkage: An integrated regional planning process will result in a full range of career-vocational education programs and services that meet the needs of students and employers, including students with special needs.

Employer Linkage: Local career-vocational education plans will include the participation of employers in providing incentives for students, such as work experience, grants, scholarships, and employment opportunities.

"C" Priorities

Program Staffing: Teacher education programs in public and private colleges and universities will be consistent with statewide policies and goals for career-vocational education and include a focus on emerging technologies.

Delineation of Functions in Program Delivery: Locally developed regional career-vocational education plans and policies will be consistent with policies adopted by the State-level governing boards.

Interagency Linkage: Career-vocational education policies developed by the Joint Advisory Policy Council will reflect the linkage with other public agencies offering employment training programs.

Student Access and Retention: Students make informed educational choices and career plans using current, accurate and objective information.

Student Access and Retention: Enrollment patterns in career-vocational education programs will be consistent with affirmative action goals and community demographics.

Program Staffing: Staff at all levels will reflect the gender and ethnicity of the student and community population.

Articulation of Programs and Support Services: The State will provide incentives for local agencies to develop and implement their area articulation plan.

Employer Linkage: State, regional, and local economic development organizations will include representatives of career-vocational education in their planning and service delivery.

Program Staffing: Credentialing and staff development programs for teachers and administrators will emphasize curriculum development, instructional methodologies and program evaluation.

Employer Linkage: Local career-vocational education providers and employers will share personnel and facilities to optimize utilization.

Employer Linkage: School/employer partnerships will be expanded to include broad-based representation of all segments of the business community.

Program Staffing: Student needs and aspirations will be communicated between career-vocational education staff and other educators at all levels.

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